# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/805,083 | 03/19/2004 | Per-Ake Larson | | 7709 |

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| EXAMINER |
|---|
| ORTIZ, BELIX M |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2164 | |

| NOTIFICATION DATE | DELIVERY MODE |
|---|---|
| 03/04/2009 | ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

roks@microsoft.com
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-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>10 June 2008</u>.
2a)☐ This action is **FINAL**.　　　　2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-41</u> is/are pending in the application.
　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1,13,20,21 and 32</u> is/are rejected.
7)☒ Claim(s) <u>2-12, 14-19, 22-31, 33-41</u> is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
　　a)☐ All　b)☐ Some * c)☐ None of:
　　　1.☐ Certified copies of the priority documents have been received.
　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.
　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
　　* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

## DETAILED ACTION

### *Remarks*

1.  In response to communications files on June 10, 2008. Claims 1, 13, 20-21, and 32 are

amended per applicant request. Therefore, claims 1-41 are presently pending in the application.

### *Claim Rejections - 35 USC § 101*

2.  35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

3.  Claims 1-19 are directed to non-statutory subject matter.

Claim 1 are directed to a "system", this system could be interpreted

as a pure software system or software *per* se. As such, the claims lack the necessary physical

articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101.

They are clearly not a series of steps or acts to be a process nor are they a combination of

chemical compounds to be a composition of matter. As such, they fail to fall within a statutory

category. They are, at best, functional descriptive material per se.

Descriptive material can be characterized as either "functional descriptive material" or

"nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when

claimed as descriptive material per se, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional

descriptive material is recorded on some computer-readable medium, it becomes structurally and

functionally interrelated to the medium and will be statutory in most cases since use of

technology permits the function of the descriptive material to be realized. Compare In re Lowry,

32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

Claim 13 is directed to a "method", as being incomplete for omitting essential elements,

such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted

element is: it is not clear that computer storage is been use.

### *Claim Rejections - 35 USC § 103*

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   Claims 1, 13, 20-21, and 32 are rejected under 35 U.S.C. 103(a) (Eff. Filing date of

application: 3/19/2004) as being unpatentable over Carey et al. (US pub. 2001/0049685) (Eff.

Filing date of application: 6/27/2001) (hereinafter Carey) in view of Levy et al. (US pat.

6,088,524) (Eff. Filing date of application: 12/27/1995) (hereinafter Levy) and further in view of

Gluss et al. (US pat. 5,517,658) (Eff. Filing date of application: 5/4/1994) (hereinafter Gluss).

As to claims 1, 13, 20-21, and 32, Carey teaches a query plan generator that constructs a

query plan for executing the query, wherein the plan includes one or more subplan selection

operators that check a currency of a local replica against the query's currency constraint (see

abstract and paragraphs 96 and 97); and

selects the subplan using the local replica only when the constraint is met; and wherein

the query processing engine executes the query plan, including the subplan selection operators,

thereby producing a result that satisfies the query's currency constraints (see paragraphs 177 and

190).

Carey does not expressly teach a constraint parser that interprets and converts the user

specified currency constraint into a form usable by the query optimizer.

Levy teaches method and apparatus for optimizing database queries involving

aggregation predicates (see abstract), in which he teaches a constraint parser that interprets and

converts the user specified currency constraint into a form usable by the query optimizer (see col.

1, lines 5-10).

It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to have modified Carey by the teaching of Levy, because a constraint

parser that interprets and converts the user specified currency constraint into a form usable by

the query optimizer, would enable the system because, "Since many data bases are very large,

an efficient method for responding to queries is essential. The phrase "query optimization"

refers to the techniques used to organize the necessary computations, to reduce the time and

memory resources required to respond to a query. The strategy of optimization is to reduce the

number of predicates that must be computed in solving the query and to apply those predicates

as early as possible. Thus the example query above, find the highest paid employee, can be

optimized by applying the maximum salary predicate when constructing the view relation", (see

col. 3, lines 17-27.

Carey or Levy does not expressly teach using the user specified for the query optimizer.

Gluss teaches method for testing design timing parameters using a timing shell generator

(see abstract), in which he teaches converts the user specified currency constraint (see claim 1).

It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to have modified Carey by the teaching of Gluss, converts the user

specified currency constraint, would enable the system because, "A method for providing user-

specified timing constraints to a simulator of system operation, between functional modules of a

design for a system including a plurality of modules, each module having one or more terminals

and its own individual operational parameters, the user-specified timing constraints being

converted from a timing vernacular language to timing constraints in a behavioral simulation

language that is compatible with the simulator", (see claim 1).


### *Allowable Subject Matter*

Claims 2-12, 14-19, 22-31, and 33-40 are objected to as being dependent upon a rejected

base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.


### *Conclusion*

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to BELIX M. ORTIZ whose telephone number is (571)272-4081.

The examiner can normally be reached on moday-friday 9am-5pm.

The fax phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system.  Status information for published applications

may be obtained from either Private PAIR or Public PAIR.  Status information for unpublished

applications is available through Private PAIR only.  For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


/B. M. O./
Examiner of Art Unit 2164

February 20, 2009

/Charles  Rones/
Supervisory Patent Examiner, Art Unit 2164